

CALIFORNIA MARINE LIFE PROTECTION ACT INITIATIVE

APPENDICES TO THE ~~REVISED~~ FINAL DRAFT MASTER PLAN FRAMEWORK

**Strikeout and underline version
for comparison purposes**

April 4, 2005 compared to March 15, 2005

CONTENTS

- A. The Marine Life Protection Act
- B. The Marine Managed Areas Improvement Act
- C. Implementation of the ~~MLPA~~ Marine Life Protection Act: 1999-2004
- D. Strategy for Stakeholder and Interested Public Participation
- E. Social Science Tools and Methods
- F. Outline of Information Required for Proposals for Alternative Networks of Marine Protected Areas
- G. Master List of Species Likely to Benefit from ~~MPAs~~ Marine Protected Areas
- H. Summary of Recent and Ongoing Processes Related to the ~~MLPA~~ Marine Life Protection Act Initiative
- I. Description of Existing State Marine Protected Areas
- J. Glossary
- K. ~~Appendix E:~~ Suggested Outline for Regional Management Plans of ~~MPAs~~ Marine Protected Areas
- L. Draft Enforcement Action Plan

Appendix A. The Marine Life Protection Act (MLPA)

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Chapter 10.5 (commencing with Section 2850) is added to Division 3 of the Fish and Game Code, to read:

CHAPTER 10.5. MARINE LIFE PROTECTION ACT

2850. Marine Life Protection Act

This chapter shall be known and may be cited as the Marine Life Protection Act.

2851. Legislative Findings and Declarations

The Legislature finds and declares all of the following:

(a) California's marine protected areas (MPAs) were established on a piecemeal basis rather than according to a coherent plan and sound scientific guidelines. Many of these MPAs lack clearly defined purposes, effective management measures and enforcement. As a result, the array of MPAs creates the illusion of protection while falling far short of its potential to protect and conserve living marine life and habitat.

(b) California's extraordinary marine biological diversity is a vital asset to the state and nation. The diversity of species and ecosystems found in the state's ocean waters is important to public health and well-being, ecological health, and ocean-dependent industry.

(c) Coastal development, water pollution, and other human activities threaten the health of marine habitat and the biological diversity found in California's ocean waters. New technologies and demands have encouraged the expansion of fishing and other activities to formerly inaccessible marine areas that once recharged nearby fisheries. As a result, ecosystems throughout the state's ocean waters are being altered, often at a rapid rate.

(d) Fish and other sea life are a sustainable resource, and fishing is an important community asset. MPAs and sound fishery management are complementary components of a comprehensive effort to sustain marine habitats and fisheries.

(e) Understanding of the impacts of human activities and the processes required to sustain the abundance and diversity of marine life is limited. The designation of certain areas as sea life reserves can help expand our knowledge by providing baseline information and improving our understanding of ecosystems where minimal disturbance occurs.

(f) Marine life reserves are an essential element of an MPA system because they protect habitat and ecosystems, conserve biological diversity, provide a sanctuary for fish and other sea life, enhance recreational and educational opportunities, provide a reference point against which scientists can measure changes elsewhere in the marine environment, and may help rebuild depleted fisheries.

(g) Despite the demonstrated value of marine life reserves, only 14 of the 220,000 square miles of combined state and federal ocean water off California, or six-thousandths of 1 percent, are set aside as genuine no take areas.

(h) For all of the above reasons, it is necessary to modify the existing collection of MPAs to ensure that they are designed and managed according to clear, conservation-based goals and guidelines that take full advantage of the multiple benefits that can be derived from the establishment of marine life reserves.

2852. Definitions

The following definitions govern the construction of this chapter:

(a) "Adaptive management," with regard to marine protected areas, means a management policy that seeks to improve management of biological resources, particularly in areas of scientific uncertainty, by viewing program actions as tools for learning. Actions shall be designed so that, even if they fail, they will provide useful information for future actions, and monitoring and evaluation shall be emphasized so that the interaction of different elements within marine systems may be better understood.

(b) "Biogeographical regions" refers to the following oceanic or near shore areas, seaward from the mean high tide line or the mouth of coastal rivers, with distinctive biological characteristics, unless the master plan team establishes an alternative set of boundaries:

- (1) The area extending south from Point Conception.
- (2) The area between Point Conception and Point Arena.
- (3) The area extending north from Point Arena.

(c) "Marine protected area" (MPA) means a named, discrete geographic marine or estuarine area seaward of the mean high tide line or the mouth of a coastal river, including any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna that has been designated by law, administrative action, or voter initiative to protect or conserve marine life and habitat. An MPA includes marine life reserves and other areas that allow for specified commercial and recreational activities, including fishing for certain species but not others, fishing with certain practices but not others, and kelp harvesting, provided that these activities are consistent with the objectives of the area and the goals and guidelines of this chapter. MPAs are primarily intended to protect or conserve marine life and habitat, and are therefore a subset of marine managed areas (MMAs), which are broader groups of named, discrete geographic areas along the coast that protect, conserve, or otherwise manage a variety of resources and uses, including living marine resources, cultural and historical resources, and recreational opportunities.

(d) "Marine life reserve," for the purposes of this chapter, means a marine protected area in which all extractive activities, including the taking of marine species, and, at the discretion of the commission and within the authority of the commission, other activities that upset the natural ecological functions of the area, are prohibited. While, to the extent feasible, the area shall be open to the public for managed enjoyment and study, the area shall be maintained to the extent practicable in an undisturbed and unpolluted state.

2853. Redesign of MPA System: Goals and Elements

(a) The Legislature finds and declares that there is a need to reexamine and redesign California's MPA system to increase its coherence and its effectiveness at protecting the state's marine life, habitat, and ecosystems.

(b) To improve the design and management of that system, the commission, pursuant to Section 2859, shall adopt a Marine Life Protection Program, which shall have all of the following goals:

- (1) To protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems.
- (2) To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.

- (3) To improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity.
 - (4) To protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic value.
 - (5) To ensure that California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.
 - (6) To ensure that the state's MPAs are designed and managed, to the extent possible, as a network.
- (c) The program may include areas with various levels of protection, and shall include all of the following elements:
- (1) An improved marine life reserve component consistent with the guidelines in subdivision (c) of Section 2857.
 - (2) Specific identified objectives, and management and enforcement measures, for all MPAs in the system.
 - (3) Provisions for monitoring, research, and evaluation at selected sites to facilitate adaptive management of MPAs and ensure that the system meets the goals stated in this chapter.
 - (4) Provisions for educating the public about MPAs, and for administering and enforcing MPAs in a manner that encourages public participation.
 - (5) A process for the establishment, modification, or abolishment of existing MPAs or new MPAs established pursuant to this program, that involves interested parties, consistent with paragraph (7) of subdivision (b) of Section 7050, and that facilitates the designation of MPAs consistent with the master plan adopted pursuant to Section 2855.

2854. Report to the Legislature

Notwithstanding Section 7550.5 of the Government Code, the State Interagency Marine Managed Areas Workgroup established by the Resources Agency shall submit its final report to the Legislature and the commission by January 15, 2000. The workgroup shall, after appropriate consultation with members of the public, determine future actions for implementing the recommendations of its final report.

2855. Master Plan for Adoption of Marine Life Protection Program

- (a) The commission shall adopt a master plan that guides the adoption and implementation of the Marine Life Protection Program adopted pursuant to Section 2853 and decisions regarding the siting of new MPAs and major modifications of existing MPAs. The plan shall be based on the best readily available science.
- (b)
 - (1) The department shall prepare, or by contract shall cause to be prepared, a master plan in accordance with this subdivision. In order to take full advantage of scientific expertise on MPAs, the department shall convene a master plan team to advise and assist in the preparation of the master plan, or hire a contractor with relevant expertise to assist in convening such a team.
 - (2) The team members convened pursuant to this subdivision shall have expertise in marine life protection and shall be knowledgeable about the use of protected areas as a marine ecosystem management tool. The members shall also be familiar with

underwater ecosystems found in California waters, with the biology and habitat requirements of major species groups in the state's marine waters, and with water quality and related issues.

(3) The team shall be composed of the following individuals:

(A) Staff from the department, the Department of Parks and Recreation, and the State Water Resources Control Board, to be designated by each of those departments.

(B) Five to seven members who shall be scientists, one of whom may have expertise in the economics and culture of California coastal communities.

(C) One member, appointed from a list prepared by Sea Grant marine advisers, who shall have direct expertise with ocean habitat and sea life in California marine waters.

(4) The master plan shall be prepared with the advice, assistance, and involvement of participants in the various fisheries and their representatives, marine conservationists, marine scientists, and other interested persons. In preparing the master plan, the department shall confer, to the extent feasible, with the commission, the Pacific Fishery Management Council, the National Marine Fisheries Service, the United States Navy, the United States Geological Survey's national biological survey, staff from national marine sanctuaries off California, Sea Grant researchers, marine advisers, and national parks personnel.

(5) The department may engage other experts to contribute to the master plan, including scientists, geographic information system (GIS) experts, and commercial and recreational fishermen, divers, and other individuals knowledgeable about the state's underwater ecosystems, the history of fishing effort or MPA management, or other relevant subjects.

(c) The department and team, in carrying out this chapter, shall take into account relevant information from local communities, and shall solicit comments and advice for the master plan from interested parties on issues including, but not necessarily limited to, each of the following:

(1) Practical information on the marine environment and the relevant history of fishing and other resources use, areas where fishing is currently prohibited, and water pollution in the state's coastal waters.

(2) Socioeconomic and environmental impacts of various alternatives.

(3) Design of monitoring and evaluation activities.

(4) Methods to encourage public participation in the stewardship of the state's MPAs.

2856. Master Plan Preparation and Components

(a)

(1) The department and team shall use the best readily available scientific information in preparing the master plan adopted pursuant to Section 2855, and shall organize the location-specific contents, where feasible, by biogeographical region. In preparing the plan, the department and team shall use and build upon the findings of the Sea Grant survey of protected areas in California waters, which is entitled "California's Marine Protected Areas," the report of the State Interagency Marine Managed Areas Workgroup, the Department of Parks and Recreation's planning information and documents regarding existing and potential underwater parks and reserves, maps and other information from the department's marine nearshore ecosystem mapping project, and other relevant planning and scientific materials.

(2) The master plan shall include all of the following components:

- (A) Recommendations for the extent and types of habitat that should be represented in the MPA system and in marine life reserves. Habitat types described on maps shall include, to the extent possible using existing information, rocky reefs, intertidal zones, sandy or soft ocean bottoms, underwater pinnacles, sea mounts, kelp forests, submarine canyons, and seagrass beds.
- (B) An identification of select species or groups of species likely to benefit from MPAs, and the extent of their marine habitat, with special attention to marine breeding and spawning grounds, and available information on oceanographic features, such as current patterns, upwelling zones, and other factors that significantly affect the distribution of those fish or shellfish and their larvae.
- (C) Recommendations to augment or modify the guidelines in subdivision (c) of Section 2857, if necessary to ensure that the guidelines reflect the most up-to-date science, including, for example, recommendations regarding the minimum size of individual marine life reserves needed to accomplish the various goals set forth in Section 2853.
- (D) Recommended alternative networks of MPAs, including marine life reserves in each biogeographical region that are capable of achieving the goals in Section 2853 and designed according to the guidelines in subdivision (c) of Section 2857.
- (E) A simplified classification system, which shall be consistent with the goals of Section 2853 and the guidelines in subdivision (c) of Section 2857, and which may include protections for specific habitats or species, if no system that meets these specifications has already been developed.
- (F) Recommendations for a preferred siting alternative for a network of MPAs that is consistent with the goals in Section 2853 and the guidelines in subdivision (c) of Section 2857.
- (G) An analysis of the state's current MPAs, based on the preferred siting alternative, and recommendations as to whether any specific MPAs should be consolidated, expanded, abolished, reclassified, or managed differently so that, taken as a group, the MPAs best achieve the goals of Section 2853 and conform to the guidelines in subdivision (c) of Section 2857.
- (H) Recommendations for monitoring, research, and evaluation in selected areas of the preferred alternative, including existing and long-established MPAs, to assist in adaptive management of the MPA network, taking into account existing and planned research and evaluation efforts.
- (I) Recommendations for management and enforcement measures for the preferred alternative that apply systemwide or to specific types of sites and that would achieve the goals of this chapter.
- (J) Recommendations for improving the effectiveness of enforcement practices, including, to the extent practicable, the increased use of advanced technology surveillance systems.
- (K) Recommendations for funding sources to ensure all MPA management activities are carried out and the Marine Life Protection Program is implemented.
- (b) The team shall, as necessary, identify and define additional appropriate components of the master plan as soon as possible after enactment of this section.

2857. Department to Convene Workshops

(a) On or before July 1, 2001, the department shall convene, in each biogeographical region and to the extent practicable near major working harbors, siting workshops, composed of interested parties, to review the alternatives for MPA networks and to provide advice on a preferred siting alternative. The department and team shall develop a preferred siting alternative that incorporates information and views provided by people who live in the area and other interested parties, including economic information, to the extent possible while maintaining consistency with the goals of Section 2853 and guidelines in subdivision (c) of this section.

(b) The preferred alternative may include MPAs that will achieve either or both of the following objectives:

(1) Protection of habitat by prohibiting potentially damaging fishing practices or other activities that upset the natural ecological functions of the area.

(2) Enhancement of a particular species or group of species, by prohibiting or restricting fishing for that species or group within the MPA boundary.

(c) The preferred siting alternative shall include MPA networks with an improved marine life reserve component, and shall be designed according to each of the following guidelines:

(1) Each MPA shall have identified goals and objectives. Individual MPAs may serve varied primary purposes while collectively achieving the overall goals and guidelines of this chapter.

(2) Marine life reserves in each bioregion shall encompass a representative variety of marine habitat types and communities, across a range of depths and environmental conditions.

(3) Similar types of marine habitats and communities shall be replicated, to the extent possible, in more than one marine life reserve in each biogeographical region.

(4) Marine life reserves shall be designed, to the extent practicable, to ensure that activities that upset the natural ecological functions of the area are avoided.

(5) The MPA network and individual MPAs shall be of adequate size, number, type of protection, and location to ensure that each MPA meets its objectives and that the network as a whole meets the goals and guidelines of this chapter.

(d) The department and team, in developing the preferred siting alternative, shall take into account the existence and location of commercial kelp beds.

(e) The department and team may provide recommendations for phasing in the new MPAs in the preferred siting alternative.

2858. Peer Review of Scientific Basis for Master Plan

The department shall establish a process for external peer review of the scientific basis for the master plan prepared pursuant to Section 2855. The peer review process may be based, to the extent practicable, on the peer review process described in Section 7062.

2859. Draft of Master Plan: Due Date and Review

(a) On or before January 1, 2005, the department shall submit to the commission a draft of the master plan prepared pursuant to this chapter.

(b) On or before April 1, 2005, after public review, not less than three public meetings, and appropriate modifications of the draft plan, the department shall submit a proposed final master plan to the commission. On or before December 1, 2005, the commission shall adopt a final master plan and a Marine Life Protection Program with regulations based on the plan

and shall implement the program, to the extent funds are available. The commission's adoption of the plan and a program based on the plan shall not trigger an additional review under the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(c) The commission shall hold at least two public hearings on the master plan and the Marine Life Protection Program prior to adopting the plan and program. The commission may adopt the plan and the program immediately following the second public hearing or at any duly noticed subsequent meeting.

(d) Upon the commission's adoption of the program, the commission shall submit the master plan and program description, including marine life reserve and other MPA designations, to the Joint Committee on Fisheries and Aquaculture for review and comment. Upon receipt of the plan, the joint committee shall have 60 days to review the plan and to submit written recommendations to the commission regarding the plan and program. The joint committee shall only submit a recommendation to the commission if a majority of the members agree to that recommendation. The commission shall consider all recommendations submitted by the joint committee, and may amend the program to incorporate the recommendations. If the commission does not incorporate any recommendations submitted by the joint committee, the commission shall set forth, in writing, its reasons for not incorporating that recommendation.

2860. Regulation of Commercial and Recreational Fishing or Taking of Marine Species in MPAs; Requirements of Adoption of New MPA

(a) The commission may regulate commercial and recreational fishing and any other taking of marine species in MPAs.

(b) Notwithstanding any other provision of this code, the taking of a marine species in a marine life reserve is prohibited for any purpose, including recreational and commercial fishing, except that the commission may authorize the taking of a marine species for scientific purposes, consistent with the purposes of this chapter, under a scientific collecting permit issued by the department.

2861. Review of Petitions to Add, Delete or Modify MPAs

(a) The commission shall, annually until the master plan is adopted and thereafter at least every three years, receive, consider, and promptly act upon petitions from any interested party, to add, delete, or modify MPAs, favoring those petitions that are compatible with the goals and guidelines of this chapter.

(b) Prior to the adoption of a new MPA or the modification of an existing MPA that would make inoperative a statute, the commission shall provide a copy of the proposed MPA to the Legislature for review by the Joint Committee on Fisheries and Aquaculture or, if there is no such committee, to the appropriate policy committee in each house of the Legislature.

(c) Nothing in this chapter restricts any existing authority of the department or the commission to make changes to improve the management or design of existing MPAs or designate new MPAs prior to the completion of the master plan. The commission may abbreviate the master plan process to account for equivalent activities that have taken place before enactment of this chapter, providing that those activities are consistent with this chapter.

2862. Adverse Impacts in Analysis of Projects

The department, in evaluating proposed projects with potential adverse impacts on marine life and habitat in MPAs, shall highlight those impacts in its analysis and comments related to the project and shall recommend measures to avoid or fully mitigate any impacts that are inconsistent with the goals and guidelines of this chapter or the objectives of the MPA.

2863. Department to Confer with U.S. Navy

The department shall confer as necessary with the United States Navy regarding issues related to its activities.

FINAL DRAFT

Appendix B. The Marine Managed Areas Improvement Act (MMAIA)

PUBLIC RESOURCES CODE SECTION 36700-36900

36600. This chapter shall be known, and may be cited, as the Marine Managed Areas Improvement Act.

36601. (a) The Legislature finds and declares all of the following:

(1) California's extraordinary ocean and coastal resources provide a vital asset to the state and nation. These resources are important to public health and well-being, ecological health, and ocean-dependent industries.

(2) The ocean ecosystem is inextricably connected to the land, with coastal development, water pollution, and other human activities threatening the health of marine habitat and the biological diversity found in California's ocean waters. New technologies and demands have encouraged the expansion of fishing and other activities to formerly inaccessible marine areas that once recharged nearby fisheries. As a result, ecosystems throughout the state's ocean waters are being altered, often at a rapid rate.

(3) California's marine managed areas (MMAs), such as refuges, reserves, and state reserves, are one of many tools for resource managers to use for protecting, conserving, and managing the state's valuable marine resources. MMAs can offer many benefits, including protecting habitats, species, cultural resources, and water quality; enhancing recreational opportunities; and contributing to the economy through such things as increased tourism and property values. MMAs may also benefit fisheries management by protecting representative habitats and reducing extractive uses.

(4) The array of state MMAs in California is the result of over 50 years of designations through legislative, administrative, and statewide ballot initiative actions, which has led to 18 classifications and subclassifications of these areas.

(5) A State Interagency Marine Managed Areas Workgroup was convened by the Resources Agency to address this issue, bringing together for the first time all of the state agencies with jurisdiction over these areas. This group's report indicates that California's state MMAs have evolved on a case-by-case basis, without conforming to any plan for establishing MMAs in the most effective way or in a manner which ensures that the most representative or unique areas of the ocean and coastal environment are included.

(6) The report further states that California's MMAs do not comprise an organized system, as the individual sites are not designated, classified, or managed in a systematic manner. Many of these areas lack clearly defined purposes, effective management measures, and enforcement.

(7) To some, this array of MMAs creates the illusion of a comprehensive system of management, while in reality, it falls short of its potential to protect, conserve, and manage natural, cultural, and recreational resources along the California coast. Without a properly designed and coordinated system of MMAs, it is difficult for agencies to meet management objectives, such as maintaining biodiversity, providing education and outreach, and protecting marine resources.

(8) Agency personnel and the public are often confused about the laws, rules, and regulations that apply to MMAs, especially those adjacent to a terrestrial area set aside for

management purposes. Lack of clarity about the manner in which the set of laws, rules, and regulations for the array of MMAs interface and complement each other limits public and resource managers' ability to understand and apply the regulatory structure.

(9) Designation of sites and subsequent adoption of regulations often occur without adequate consideration being given to overall classification goals and objectives. This has contributed to fragmented management, poor compliance with regulations, and a lack of effective enforcement.

(10) Education and outreach related to state MMAs is limited and responsibility for these activities is distributed across many state agencies. These factors hamper the distribution of information to the public regarding the benefits of MMAs and the role they can play in protecting ocean and coastal resources.

(11) There are few coordinated efforts to identify opportunities for public/private partnerships or public stewardship of MMAs or to provide access to general information and data about ocean and coastal resources within California's MMAs.

(12) Ocean and coastal scientists and managers generally know far less about the natural systems they work with than their terrestrial counterparts. Understanding natural and human-induced factors that affect ocean ecosystem health, including MMAs, is fundamental to the process of developing sound management policies.

(13) Research in California's MMAs can provide managers with a wealth of knowledge regarding habitat functions and values, species diversity, and complex physical, biological, chemical, and socioeconomic processes that affect the health of marine ecosystems. That information can be useful in determining the effectiveness of particular sites or classifications in achieving stated goals.

(b) With the single exception of state estuaries, it is the intent of the Legislature that the classifications currently available for use in the marine and estuarine environments of the state shall cease to be used and that a new classification system shall be established, with a mission, statement of objectives, clearly defined designation guidelines, specific classification goals, and a more scientifically-based process for designating sites and determining their effectiveness. The existing classifications may continue to be used for the terrestrial and freshwater environments of the state.

(c) Due to the interrelationship between land and sea, benefits can be gained from siting a portion of the state's marine managed areas adjacent to, or in close proximity to, terrestrial protected areas. To maximize the benefits that can be gained from having connected protected areas, whenever an MMA is adjacent to a terrestrial protected area, the managing agencies shall coordinate their activities to the greatest extent possible to achieve the objectives of both areas.

36602. The following definitions govern the construction of this chapter:

(a) "Committee" is the State Interagency Coordinating Committee established pursuant to Section 36800.

(b) "Designating entity" is the Fish and Game Commission, State Park and Recreation Commission, or State Water Resources Control Board, each of which has the authority to designate specified state marine managed areas.

(c) "Managing agency" is the Department of Fish and Game or the Department of Parks and Recreation, each of which has the authority to manage specified state marine managed areas.

(d) "Marine managed area" (MMA) is a named, discrete geographic marine or estuarine area along the California coast designated by law or administrative action, and intended to protect,

conserve, or otherwise manage a variety of resources and their uses. The resources and uses may include, but are not limited to, living marine resources and their habitats, scenic views, water quality, recreational values, and cultural or geological resources. General areas that are administratively established for recreational or commercial fishing restrictions, such as seasonal or geographic closures or size limits, are not included in this definition. MMAs include the following classifications:

- (1) State marine reserve, as defined in subdivision (a) of Section 36700.
 - (2) State marine park, as defined in subdivision (b) of Section 36700.
 - (3) State marine conservation area, as defined in subdivision (c) of Section 36700.
 - (4) State marine cultural preservation area, as defined in subdivision (d) of Section 36700.
 - (5) State marine recreational management area, as defined in subdivision (e) of Section 36700.
 - (6) State water quality protection areas, as defined in subdivision (f) of Section 36700.
- (e) "Marine protected area" (MPA), consistent with the Marine Life Protection Act (Chapter 10.5 (commencing with Section 2850) of Division 3 of the Fish and Game Code) is a named, discrete geographic marine or estuarine area seaward of the mean high tide line or the mouth of a coastal river, including any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna that has been designated by law or administrative action to protect or conserve marine life and habitat. MPAs are primarily intended to protect or conserve marine life and habitat, and are therefore a subset of marine managed areas (MMAs). MPAs include the following classifications:
- (1) State marine reserve, as defined in subdivision (a) of Section 36700.
 - (2) State marine park, as defined in subdivision (b) of Section 36700.
 - (3) State marine conservation area, as defined in subdivision (c) of Section 36700.

36620. The mission of the state MMA system is to ensure the long-term ecological viability and biological productivity of marine and estuarine ecosystems and to preserve cultural resources in the coastal sea, in recognition of their intrinsic value and for the benefit of current and future generations. In support of this mission, the Legislature finds and declares that there is a need to reexamine and redesign California's array of MMAs, to establish and manage a system using science and clear public policy directives to achieve all of the following objectives:

- (a) Conserve representative or outstanding examples of marine and estuarine habitats, biodiversity, ecosystems, and significant natural and cultural features or sites.
- (b) Support and promote marine and estuarine research, education, and science-based management.
- (c) Help ensure sustainable uses of marine and estuarine resources.
- (d) Provide and enhance opportunities for public enjoyment of natural and cultural marine and estuarine resources.

36700. Six classifications for designating managed areas in the marine and estuarine environments are hereby established as described in this section, to become effective January 1, 2002. Where the term "marine" is used, it refers to both marine and estuarine areas. A geographic area may be designated under more than one classification.

(a) A "state marine reserve" is a nonterrestrial marine or estuarine area that is designated so the managing agency may achieve one or more of the following:

- (1) Protect or restore rare, threatened, or endangered native plants, animals, or habitats in marine areas.

(2) Protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems.

(3) Protect or restore diverse marine gene pools.

(4) Contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative, or imperiled marine habitats or ecosystems.

(b) A "state marine park" is a nonterrestrial marine or estuarine area that is designated so the managing agency may provide opportunities for spiritual, scientific, educational, and recreational opportunities, as well as one or more of the following:

(1) Protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems.

(2) Contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding representative or imperiled marine habitats or ecosystems.

(3) Preserve cultural objects of historical, archaeological, and scientific interest in marine areas.

(4) Preserve outstanding or unique geological features.

(c) A "state marine conservation area" is a nonterrestrial marine or estuarine area that is designated so the managing agency may achieve one or more of the following:

(1) Protect or restore rare, threatened, or endangered native plants, animals, or habitats in marine areas.

(2) Protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems.

(3) Protect or restore diverse marine gene pools.

(4) Contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative, or imperiled marine habitats or ecosystems.

(5) Preserve outstanding or unique geological features.

(6) Provide for sustainable living marine resource harvest.

(d) A "state marine cultural preservation area" is a nonterrestrial marine or estuarine area designated so the managing agency may preserve cultural objects or sites of historical, archaeological, or scientific interest in marine areas.

(e) A "state marine recreational management area" is a nonterrestrial marine or estuarine area designated so the managing agency may provide, limit, or restrict recreational opportunities to meet other than exclusively local needs while preserving basic resource values for present and future generations.

(f) A "state water quality protection area" is a nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Resources Control Board through its water quality control planning process. "Areas of special biological significance" are a subset of state water quality protection areas, and require special protection as determined by the State Water Resources Control Board pursuant to the California Ocean Plan adopted and reviewed pursuant to Article 4 (commencing with Section 13160) of Chapter 3 of Division 7 of the Water Code and pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) adopted by the state board.

36710. (a) In a state marine reserve, it is unlawful to injure, damage, take, or possess any living geological, or cultural marine resource, except under a permit or specific authorization from the managing agency for research, restoration, or monitoring purposes. While, to the extent feasible, the area shall be open to the public for managed enjoyment and study, the area shall be maintained to the extent practicable in an undisturbed and unpolluted state. Access and use for activities including, but not limited to, walking, swimming, boating, and diving may be restricted to protect marine resources. Research, restoration, and monitoring may be permitted by the managing agency. Educational activities and other forms of nonconsumptive human use may be permitted by the designating entity or managing agency in a manner consistent with the protection of all marine resources.

(b) In a state marine park, it is unlawful to injure, damage, take, or possess any living or nonliving marine resource for commercial exploitation purposes. Any human use that would compromise protection of the species of interest, natural community or habitat, or geological, cultural, or recreational features, may be restricted by the designating entity or managing agency. All other uses are allowed, including scientific collection with a permit, research, monitoring, and public recreation, including recreational harvest, unless otherwise restricted. Public use, enjoyment, and education are encouraged, in a manner consistent with protecting resource values.

(c) In a state marine conservation area, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial or recreational purposes, or a combination of commercial and recreational purposes, that the designating entity or managing agency determines would compromise protection of the species of interest, natural community, habitat, or geological features. The designating entity or managing agency may permit research, education, and recreational activities, and certain commercial and recreational harvest of marine resources.

(d) In a state marine cultural preservation area, it is unlawful to damage, take, or possess any cultural marine resource. Complete integrity of the cultural resources shall be sought, and no structure or improvements that conflict with that integrity shall be permitted. No other use is restricted.

(e) In a state marine recreational management area, it is unlawful to perform any activity that, as determined by the designating entity or managing agency, would compromise the recreational values for which the area may be designated. Recreational opportunities may be protected, enhanced, or restricted, while preserving basic resource values of the area. No other use is restricted.

(f) In a state water quality protection area, point source waste and thermal discharges shall be prohibited or limited by special conditions. Nonpoint source pollution shall be controlled to the extent practicable. No other use is restricted.

36711. The classifications contained in Section 36710 may not be inconsistent with United States military activities deemed mission critical by the United States military.

36725. (a) The Fish and Game Commission may designate, delete, or modify state marine recreational management areas established by the commission for hunting purposes, state marine reserves, and state marine conservation areas. The Fish and Game Commission shall consult with, and secure concurrence from, the State Park and

Recreation Commission prior to modifying or deleting state marine reserves and state marine conservation areas designated by the State Park and Recreation Commission. The Fish and Game Commission shall not delete or modify state marine recreational management areas designated by the State Park and Recreation Commission.

(b) The State Park and Recreation Commission may designate, delete, or modify state marine reserves, state marine parks, state marine conservation areas, state marine cultural preservation areas, and state marine recreational management areas. The State Park and Recreation Commission may not designate, delete, or modify a state marine reserve, state marine park, or state marine conservation area without the concurrence of the Fish and Game Commission on any proposed restrictions upon, or change in, the use of living marine resources.

(c) If an unresolved conflict exists between the Fish and Game Commission and the State Park and Recreation Commission regarding a state marine reserve, state marine park, or state marine conservation area, the Secretary of the Resources Agency may reconcile the conflict.

(d) The State Water Resources Control Board may designate, delete, or modify state water quality protection areas.

(e) The Fish and Game Commission, State Park and Recreation Commission, and State Water Resources Control Board each may restrict or prohibit recreational uses and other human activities in the MMAs for the benefit of the resources therein, except in the case of restrictions on the use of living marine resources. Pursuant to this section, and consistent with Section 2860 of the Fish and Game Code, the Fish and Game Commission may regulate commercial and recreational fishing and any other taking of marine species in MMAs.

(f) (1) The Department of Fish and Game may manage state marine reserves, state marine conservation areas, state marine recreational management areas established for hunting purposes and, if requested by the State Water Resources Control Board, state water quality protection areas.

(2) The Department of Parks and Recreation may manage state marine reserves, state marine parks, state marine conservation areas, state marine cultural preservation areas, and state marine recreational management areas. Department authority over units within the state park system shall extend to units of the state MMAs system that are managed by the department.

(3) The State Water Resources Control Board and the California regional water quality control boards may take appropriate actions to protect state water quality protection areas. The State Water Resources Control Board may request the Department of Fish and Game or the Department of Parks and Recreation to take appropriate management action.

36750. Any MMA in existence on January 1, 2002, that has not been reclassified in accordance with the Marine Life Protection Act (Chapter 10.5 (commencing with Section 2850) of Division 3 of the Fish and Game Code), shall be reclassified under the classification system described in Section 36700 by January 1, 2003, based upon the management purpose and level of resource protection at each site on January 1, 2002. Upon the reclassification of existing sites, but no later than January 1, 2003, the use of all other classifications shall cease for the marine and estuarine environments of the state, though the classifications may continue to be used for the terrestrial and freshwater environments where applicable. The reclassification process shall be the responsibility of the State Interagency Coordinating Committee established pursuant to Section 36800, and shall occur to the extent feasible in conjunction and consistent with the MMA master planning process created pursuant to the

Marine Life Protection Act (Chapter 10.5 (commencing with Section 2850) of Division 3 of the Fish and Game Code).

36800. The Secretary of the Resources Agency shall establish and chair the State Interagency Coordinating Committee, whose members are representatives from those state agencies, departments, boards, commissions, and conservancies with jurisdiction or management interests over marine managed areas, including, but not limited to, the Department of Fish and Game, Department of Parks and Recreation, California Coastal Commission, State Water Resources Control Board, and State Lands Commission. The Secretary of the Resources Agency shall designate additional members of the committee. The committee shall review proposals for new or amended MMAs to ensure that the minimum required information is included in the proposal, to determine those state agencies that should review the proposal, and to ensure consistency with other such designations in the state. The committee shall also serve to ensure the proper and timely routing of site proposals, review any proposed site-specific regulations for consistency with the state system as a whole, and conduct periodic reviews of the statewide system to evaluate whether it is meeting the mission and statement of objectives.

36850. Designation guidelines based on the classification goals adopted for the state system of MMAs shall be developed jointly by the appropriate managing agencies in cooperation with the committee on or before January 1, 2002. These guidelines shall be used to provide a general sense of requirements for designating a site in any particular classification, and may include characteristics such as uniqueness of the area or resource, biological productivity, special habitats, cultural or recreational values, and human impacts to the area. These designation guidelines shall be provided on a standard set of instructions for each classification.

36870. On or before January 1, 2002, the committee shall establish a standard set of instructions for each classification to guide organizations and individuals in submitting proposals for designating specific sites or networks of sites. On or before January 1, 2003, the relevant site proposal guidelines shall be adopted by each designating entity.

(a) At a minimum, each proposal shall include the following elements for consideration for designation as an MMA:

- (1) Name of individual or organization proposing the designation.
- (2) Contact information for the individual or organization, including contact person.
- (3) Proposed classification.
- (4) Proposed site name.
- (5) Site location.
- (6) Need, purpose, and goals for the site.
- (7) Justification for the manner in which the proposed site meets the designation criteria for the proposed classification.
- (8) A general description of the proposed site's pertinent biological, geological, and cultural resources.
- (9) A general description of the proposed site's existing recreational uses, including fishing, diving, boating, and waterfowl hunting.

(b) The following elements, if not included in the original proposal, shall be added by the proposed managing agency in cooperation with the individual or organization making the proposal, prior to a final decision regarding designation:

- (1) A legal description of the site boundaries and a boundary map.
- (2) A more detailed description of the proposed site's pertinent biological, geological, cultural, and recreational resources.
- (3) Estimated funding needs and proposed source of funds.
- (4) A plan for meeting enforcement needs, including on-site staffing and equipment.
- (5) A plan for evaluating the effectiveness of the site in achieving stated goals.
- (6) Intended educational and research programs.
- (7) Estimated economic impacts of the site, both positive and negative.
- (8) Proposed mechanisms for coordinating existing regulatory and management authority, if any exists, within the area.
- (9) An evaluation of the opportunities for cooperative state, federal, and local management, where the opportunities may exist.

36900. Individuals or organizations may submit a proposal to designate an MMA directly through the committee or an appropriate designating entity. Proposals submitted to a designating entity shall be forwarded to the committee to initiate the review process. Proposals for designating, deleting, or modifying MMAs may be submitted to the committee or a designating entity at any time. The committee and scientific review panel established pursuant to subdivision (b) shall annually consider and promptly act upon proposals until an MPA master plan is adopted pursuant to subdivision (b) of Section 2859 of the Fish and Game Code, and thereafter, no less than once every three years. Upon adoption of a statewide MPA plan, subsequent site proposals determined by the committee to be consistent with that plan shall be eligible for a simplified and cursory review of not more than 45 days.

(a) The committee shall review proposals to ensure that the minimum required information is included in the proposal, to determine those state agencies that should review the proposal, and to ensure consistency with other designations of that type in the state. After initial review by the coordinating committee and appropriate agencies, the proposal shall be forwarded to a scientific review panel established pursuant to subdivision (b).

(b) The Secretary of the Resources Agency shall establish a scientific review panel, with statewide representation and direction from the committee, to evaluate proposals for technical and scientific validity, including consideration of such things as site design criteria, location, and size. This panel, to the extent practical, shall be the same as the master plan team used in the process set forth in the Marine Life Protection Act (Chapter 10.5 (commencing with Section 2850) of Division 3 of the Fish and Game Code). Members shall maintain familiarity with the types and effectiveness of MMAs used in other parts of the world for potential application to California. Members shall be reimbursed reasonable costs to participate in the activities of the panel. Where feasible, advice shall be sought from the appropriate federal agencies and existing regional or statewide marine research panels and advisory groups. After review by the scientific review panel, the committee shall forward the proposal and any recommendations to the appropriate designating entity for a public review process.

(c) Designating entities shall establish a process that provides for public review and comment in writing and through workshops or hearings, consistent with the legal mandates applicable to designating entities. All input provided by the committee and scientific review panel shall be made available to the public during this process. Outreach shall be made to the

broadest ocean and coastal constituency possible, and shall include commercial and sport fishing groups, conservation organizations, waterfowl groups and other recreational interests, academia, the general public, and all levels of government.

(d) This process does not replace the need to obtain the appropriate permits or reviews of other government agencies with jurisdiction or permitting authority.

(e) Nothing in this section shall be construed as altering or impeding the process identified under the Marine Life Protection Act (Chapter 10.5 (commencing with Section 2850) of Division 3 of the Fish and Game Code) or the actions of the master plan team described in that act.

FINAL DRAFT

Appendix C. Implementation of the MLPA Marine Life Protection Act: 1999-2004

In April 2001 a general informational two-page letter was mailed to approximately 7,000 constituents. The letter provided information about the MLPA process and asked for initial recommendations about the effectiveness of existing MPAs, possible modifications of existing MPAs, and possible additional MPAs. About half of the letters were sent to commercial fishers, for which the Department of Fish and Game (DFG) maintains a comprehensive mailing list. However, at the time DFG did not have an adequate mailing list for recreational anglers and other members of the public, and many constituents did not become aware of the MLPA process, in particular the July 2001 public workshops, until during or after July.

In April 2001 supplementary letters were included with the informational letters and sent to commercial fishers as well as those recreational fishing constituents in our data base at the time. This included all commercial passenger fishing vessel (CPFV) landings and the primary recreational diving and angling organizations (including Cen Cal Divers and United Anglers representatives). These letters contained DFG fishing block maps (numbered 10 x 10 square mile areas partially or entirely within state waters) and requested informational on areas of primary use, with the intention of using this information to help reduce potential socioeconomic impacts from recommended MPAs.

Approximately 215 responses were received during the next several months. These were of limited value to the Master Plan Team; many of the DFG block maps indicated all blocks were important within a region.

Initial Draft Concepts, which identified areas the Master Plan Team thought worthy of consideration as MPAs, were developed during January to July 2001 by the Master Plan Team. They were primarily based on the recommendations of the Master Plan Team scientists. Although fishery data were considered, there was little input from constituent user groups nor was there any initial socioeconomic analysis. The team realized that the proposals would generate controversy but it was felt that the Initial Draft Concepts would serve as a starting point from which to consider public input on potential negative impacts to users. The team stated at all public workshops in July 2001 that these proposals would be revised based on public input.

Each of the four initial draft concepts was made available on DFG's MLPA website, and at DFG Marine Region offices, during June-July 2001, approximately two weeks before the scheduled workshops for a particular region.

The draft concepts for the four regions differed because each region is characterized by differences in environmental conditions, the status of marine populations and ecosystems, the levels of historical and on-going extraction and human use; and the extent of existing MPAs. No predetermined percentage of state waters was designated for any form of protection in any of the regions.

To meet the MLPA goals, the MLPA Master Plan Team employed the following criteria in developing the draft concepts for regional networks of MPAs for California. Design elements

included MPA location, shape, size, number, association with existing MPAs and other area-based regulations. The criteria are organized into three categories: 1) habitat; 2) size and spacing; and 3) practicality.

As stated previously, the team presented the initial draft concepts to the public at ten workshops throughout the state. An informational two-page notice was mailed to the same list of approximately 7,000 constituents in mid-June, provided to the press, and made available at Marine Region offices and on the MLPA website. In all, approximately 2,500 people attended the workshops.

The informal phase of public comment for the MLPA process was an extensive one and began with the mass mailing of the previously mentioned informational letter in mid-April 2001. From then until mid June 2001, when the first initial draft concept (North Central Region) became available to the public, approximately 340 comments were received, primarily via letter and email. Of these approximately 215 were related to the supplementary informational letters and contained the DFG block maps. Understandably, most comments were of a general nature but varied substantially in content.

Between mid-June and mid-November approximately 2,915 additional comments were received, including the following subsets: 400 individual letters, 235 form letters, 235 emails, 1,215 form emails, 420 form faxes, and 370 form postcards. It would serve no purpose to quantify these comments as for or against MPAs in general, or with the many subtle variations of compromises in between.

All comments were distributed to appropriate team members for their consideration. If comments applied only to a specific region they were sent only to the regional team members and to the three at-large members (Jim Barry, Frank Palmer, John Dixon). Although most comments were received and distributed, in general individuals did not receive acknowledgment or response. Exceptions included letters sent to the Governor or the Director of Fish and Game and subsequently forwarded to the South Central region coordinator for response.

After the July public workshops it became apparent to the team that additional venues were necessary for public input to the MLPA process. From late August to December 2001, team members within each region conducted small group meetings with constituent representatives to discuss concerns with the process and with the initial draft concepts. Constituent groups were contacted based on input from DFG, team members, and the constituents themselves, who often requested a meeting. An attempt was made to reach every major constituent group within each region. More than 60 individual small group meetings were held in areas throughout the state.

Regional coordinators were responsible for providing a summary of each meeting to all team members. These summaries were eventually placed on the MLPA website for public review. Many useful suggestions were made, including alternative sites, modification of existing sites, either in proposed boundaries and/or regulations. Areas were identified that would create a significant negative socioeconomic impact on users if designated as MPAs.

In October 2001, AB1673 extended by one year the deadline by which DFG must present a proposed final master plan to the Fish and Game Commission. The deadline became April 1, 2003 with a final adoption date of July 1, 2003.

Then Fish and Game Director Robert Hight formally announced a change in direction for the MLPA process at a legislative hearing in January 2002. The process included the formation of seven regional working groups, two in southern California, two in south-central California, one in north-central California, and two in northern California. Each group had a DFG representative, one or more Master Plan Team scientists, DFG geographic information systems (GIS) support, and a professional facilitator. The groups were intended to work towards a set of proposals for their region, each of which would constitute a network of marine protected areas.

Additionally, four more Marine Region staff were redirected to assist with the regional working group process.

Between February and April 2002, DFG MLPA staff solicited nominations for the seven working groups. In April 2002 Director Hight formally appointed approximately 150 working group members in seven regions to the MLPA process. At the same time, DFG developed a web site dedicated to the MLPA process. In June 2002 DFG completed an initial evaluation of existing state MPAs. These evaluations were provided to all MLPA working group members as background material for their deliberations.

A series of three initial working group meetings occurred in July of 2002, each with a professional facilitator, to begin the revised MLPA process. These initial meetings served as an orientation to the new process. Each of the seven groups then met separately two times between September 2002 and January 2003.

In September 2002, AB892 further extended the deadline by which DFG must present a proposed final master plan to the Fish and Game Commission. The deadline then became January 1, 2005 with a final adoption date of December 2005.

In February 2003 a socio-economic workshop was held in Santa Cruz to begin discussions of how to incorporate socio-economic data into the MLPA process.

Between March 2003 and January 2004 the working group process was placed on an informal hold, as DFG tried to secure funding adequate to support the process through completion. In January 2004 this pause became permanent and discussions of alternative processes began.

Past Funding of MLPA Activities

Funding Directly Related to the MLPA

- *June 2000:* The David and Lucile Packard Foundation provided a grant of \$49,460 to the National Fish and Wildlife Foundation for implementation of the MLPA, mostly travel and per diem costs for scientists attending meetings of the Master Plan Team. This funding was matched by Coastal Impact Assessment Program (CIAP) funds described

more fully below. The combined funds supported a graduate student assistant to the Master Plan Team, development and maintenance of a web page for public information, and public meetings.

- *2000:* The California State Legislature appropriated and the Governor approved \$2 million for implementation of the Marine Life Management Act and the MLPA. Most of this funding was expended on implementing the MLMA, although some funding provided staff support to the Master Plan Team.
- *2001-2002:* The Resources Agency provided \$372,000 in federal CIAP funds to the Department of Fish and Game for MLPA implementation. This funding was directed to support of the public process and for GIS support. It is expected that the GIS support funds will be used in the 2005-2006 fiscal year.
- *2003:* The Resources Agency provided \$379,000 in federal CIAP funds for biological and socioeconomic research managed by California Sea Grant in support of implementation of the MLPA. It is expected that funds will be dispersed to specific projects early in 2005.
- *2003:* The California State Legislature appropriated and the Governor approved \$800,000 for fiscal year 2004 implementation of the MLPA. These funds, however, were not sufficient to fully fund the process without significant match from outside sources. Additionally, the funds would have required an equal reduction in funding from other important programs. The final 2003 budget did not include this funding.
- *2004:* The California State Legislature appropriated and the Governor approved \$500,000 for MLPA implementation in fiscal year 2005 and a continuing annual appropriation for following years. Private foundations assembled \$7.5 million in funding through 2006.

Related Funding

Since 1997, the Department of Fish and Game and several programs in the National Oceanic and Atmospheric Administration have provided nearly \$2 million in funding for strategic habitat mapping in certain areas along the coast. DFG has provided ongoing staff support through general funds and Federal Sport Fish Restoration Act grant funding of staff positions to the MLPA process. DFG and several partner groups have provided support for ongoing research and monitoring in existing MPAs to help provide the scientific knowledge necessary for the MLPA.

Appendix D. Strategy for Stakeholder and Interested Public Participation

This section to be added upon adoption by the MLPA Blue Ribbon Task Force.

FINAL DRAFT

Appendix E: Social Science Tools and Methods

This table contains summaries of a combination of selected social science tools and methods that can be used in research design, data collection and data analysis.

<u>Tool/Method</u>	<u>What Is It?</u>	<u>What Can It Be Used For?</u>
<u>Case Study Research</u>	<u>An in-depth investigation of issues at specific instances and locations.</u>	<u>To identify the attitudes, perceptions, and beliefs of most groups involved, as well as the interactions among those groups.</u>
<u>Comparative Research</u>	<u>A comparison of different analyses, that compares attributes, characteristics, or particular treatments across two or more situations.</u>	<u>Managers can compare certain characteristics of one MPA or compare the same group over time (also called "longitudinal comparison").</u>
<u>Content Analysis</u>	<u>A review of interview transcripts, newspapers, books, manuscripts, Web sites, or other documents to identify underlying meanings, or qualify occurrences of key words or phrases.</u>	<u>To help identify patterns and trends in discussions about biological, social, and political phenomena. Also to identify patterns that depict associated attitudes, perceptions, and values.</u>
<u>Cost-Benefit Analysis</u>	<u>A tool for comparing the benefits of proposed projects with the costs to identify the alternative with the maximum net benefit (benefits minus costs).</u>	<u>To understand the social costs and benefits of the marine protected area on to stakeholders or to identify alternatives that are the most cost-effective.</u>
<u>Demographic Analysis</u>	<u>A tool used to study the characteristics of human populations, such as size, growth, density, and distribution.</u>	<u>To highlight trends in the size, distribution, and density of human populations in communities.</u>
<u>Ethnographic Research</u>	<u>A method for obtaining an in-depth understanding of the history, practices, values, traditions, and circumstances of the groups and surrounding resources being studied.</u>	<u>To help managers better understand the stakeholder groups with whom they interact. Also, to reveal cultural values and practices, helping managers identify how these values and practices affect MPA management.</u>
<u>Focus Groups</u>	<u>A focus group is a group interview, typically involving 8 to 12 people about a specific topic.</u>	<u>To identify opinions, attitudes, and perceptions about a specific idea. Focus groups can also be used to inform survey development.</u>
<u>Geographic Information System (GIS)</u>	<u>A compilation of hardware, software, and data that enables users to manipulate, analyze, and display geographically referenced information.</u>	<u>To document human use patterns, identifying culturally sensitive areas, prioritizing regions for additional public access, or highlighting demographic</u>

		<u>trends within a community.</u>
<u>Historical Research</u>	<u>A review or analysis of past resource use and the social and population characteristics related to a particular geographic resource. A type of secondary data analysis.</u>	<u>To determine past social attitudes and community structure, as well as how these have changed over time. Also to identify how the attitudes, perceptions, and uses of communities and groups have evolved.</u>
<u>Interviewing</u>	<u>A method of eliciting answers to predetermined questions from one individual at a time. Questions can be modified to fit a given situation.</u>	<u>To collect detailed information from individuals which may not be available in written or published format. To provide insight into individual feelings and experiences.</u>
<u>Non-market Valuation</u>	<u>A method used to estimate the economic value of items that have no assignable market value, such as ecosystems and environmental services.</u>	<u>To estimate the value of a reef, beach, or any other resource or use that has no assignable market value.</u>
<u>Observation</u>	<u>An information-gathering technique based on personal observation and recording of human activities and behaviors.</u>	<u>To collect information about social groups, community behaviors, and resource use in normal-use situations.</u>
<u>Predictive Modeling</u>	<u>A technique that creates a model to simulate real-world situations to predict future conditions.</u>	<u>To understand possible long-term impacts of management decisions and to prevent future problems from occurring.</u>
<u>Rapid Rural Appraisal</u>	<u>A broad-level evaluation, usually through consultation with experts and stakeholders, that provides a general overview of the relationship between humans and natural resources.</u>	<u>To identify areas of concern in an MPA, such as safety issues or access issues, quickly and thoroughly. In addition, this type of broad-level evaluation can be used as a precursor to planning and can help justify decisions that need to be made quickly.</u>
<u>Secondary Data Analysis</u>	<u>Analysis of data that were collected by individuals other than the investigator. These data include newspapers, census data, maps, etc.</u>	<u>To identify or analyze characteristics of a group, populations, or issue using existing data and information.</u>
<u>Social Assessment</u>	<u>A method of data collection and analysis used to characterize the social environment in the area in which one manages (e.g., watershed, protected area).</u>	<u>To identify the principal stakeholders and to generate information about social structures, processes, and changes being produced in any given area or community. Used as a precursor to management planning.</u>

<u>Social Impact Assessment</u>	<u>Used to predict impacts related to implementation of management resources or policy changes.</u>	<u>To identify how people and communities could potentially react to changes and to predict probable impacts of the implementation of rules and regulations.</u>
<u>Social Network Analysis</u>	<u>A method used to collect, analyze, and graphically represent data that describe patterns of communication and relationships within a community.</u>	<u>To identify community opinion leaders and other influential individuals, as well as those most responsible for disseminating information, and to determine how new ideas or information will spread through a community and how fast.</u>
<u>Surveys</u>	<u>A standardized list of questions administered by mail, telephone, Internet, or in person.</u>	<u>To obtain information and opinions from a representative sample of stakeholders related to specific MPA issues.</u>

(Adapted from NOAA Coastal Services Center, <http://www.csc.noaa.gov/mpass/tooltable.html>.)